



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 155
Seattle, WA 98101

ENFORCEMENT &
COMPLIANCE
ASSURANCE DIVISION

Reply To: 20-C04

RETURN RECEIPT REQUESTED

Ms. Holly Myers
Director
Office of Drinking Water
Washington Department of Health
P.O. Box 47822
Olympia, Washington 98504

Mr. Vincent McGowan
Water Quality Program Manager
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504

Mr. Kyrre Flege
Acting Program Manager Dairy Nutrient
Management Program Washington
Department of Agriculture
1111 Washington Street Southeast
Olympia, Washington 98504

Ms. Lisa Freund
Public Services Director
Yakima County
128 North Second Street
Yakima, Washington 98901

Mr. Shawn Magee
Director of Environmental Health
Yakima Health District
1210 Ahtanum Ridge Drive
Union Gap, Washington 98903

Re: October 26th, 2021, Petition for Emergency Action Pursuant to Safe Drinking Water Act
Section 1431 to Address Nitrate Contamination of Drinking Water in the Lower Yakima
Valley, Washington

Dear Ms. Myers, Mr. McGowan, Mr. Flege, Ms. Freund and Mr. Magee:

This letter continues the dialogue between the U.S. Environmental Protection Agency (EPA or "Agency") and the state of Washington Department of Health (DOH), Department of Ecology (Ecology), Department of Agriculture (WSDA), Yakima County and Yakima Health District (YHD) regarding nitrate contamination in drinking water in the Lower Yakima Valley (LYV), Washington and the state's strategies to protect residents from associated health risks. The Agency appreciates your continued willingness to coordinate with EPA, including DOH's, Ecology's, Yakima County's and YHD's recent responses to EPA's letter and request for information, dated May 11th, 2022.

In our May 11th letter, EPA commended Washington agencies for actions already taken to identify impacted residents, to provide notice regarding nitrate contamination in the LYV and its associated health risks and to offer the opportunity to obtain alternative drinking water. These

efforts include various methods to contact and educate the public over the past decade or more, as you described in your response letters and Appendix E of the LYV Groundwater Management Area (GWMA) Program. EPA's letter also requested a plan to address *ongoing* immediate health impacts associated with nitrate contamination. Since all available information demonstrates that nitrate contamination in LYV groundwater persists, the Agency remains concerned that your responses focused primarily on state agencies' (and the County's) past efforts and lacked detail regarding the state's plans for future response actions. Nitrate contamination in drinking water will continue to adversely impact LYV residents until nitrate concentrations in underground sources of drinking water decrease to below the health-based maximum contaminant level (MCL).

The agencies' responses referenced certain ongoing and future response plans that you initiated since certification of the LYV GWMA Program in July 2019:

- Ecology invited certain residents to participate in its Ambient Groundwater Monitoring Network;
- Yakima County convened a focus group of 14 private well users and
- DOH provided funding to YHD to provide up to 75 homes with bottled water through December 2022 ("Pilot Program").

Your letters also referenced additional plans for future response actions. However, additional work is necessary. For example:

- While DOH and YHD noted that the state agencies are "in the process of making nitrate test strips available to residents," they did not provide any details regarding the timing, scope or funding for such a program;
- In describing its efforts to implement the GWMA Program's Recommendation # 44 (Perform an engineering study of water supply alternatives), Yakima County stated that implementation is dependent on funding and county programs are currently understaffed and
- Regarding the compliance status of non-transient, non-community water systems (NTNCWS), DOH - the state agency with authority to implement the Safe Drinking Water Act (SDWA) - committed to completing a work-load analysis targeted for completion in fiscal year 2023.

While we commend these efforts, more work is needed to ensure all LYV residents have access to alternative water in the near term.

Plan to Address Immediate Health Concerns

EPA expects the state and county to commit to more concrete action in the LYV. We are aware that each agency is submitting packages for funding and staffing that could support this work. For example, DOH recently explained that the Pilot Program to deliver alternative water to impacted residents is funded through 2022 and the state agencies are "seeking options" for long-term funding. However, EPA understands that, for the 2023-25 Regular Budget Session, DOH requests approximately \$800,000 per year to address homes and businesses throughout the state that rely on contaminated wells or small public water systems. This funding level is likely

insufficient to provide impacted LYV residents with alternate water, let alone to provide drinking water throughout the state to private well users impacted by any contaminant.

It is essential that such requests incorporate a coordinated and comprehensive plan to identify, contact and offer alternative water to all impacted LYV residents as soon as possible. In a July 29th, 2022 letter to the state agencies in Oregon, where similar nitrate contamination impacts residents in portions of the state, EPA listed criteria for an effective contaminated drinking water response action in that scenario. EPA considers that an adequate response plan to address immediate health concerns in the LYV must include the same minimum components:

1. **Coordination** – An effective response plan includes a communication plan that identifies how information and responsibilities will be shared among state agencies, Yakima County, YHD and any private businesses or local utilities that have volunteered or been required to act, so that each entity’s efforts serve a singular and coordinated response.
2. **Identification of Impacted Residences** – DOH’s response letter stated that it has initiated a health assessment but provided few details regarding this effort. The assessment should, in part, identify each residence that obtains drinking water from a private well in the LYV GWMA.
3. **Education and Outreach** – As stated above, Washington has conducted various public outreach efforts over many years and such efforts must continue. Public education and outreach should be conducted in a form and manner reasonably calculated to reach all impacted LYV residents and consistent with analogous requirements and suggestions for Tier 1 public notice set forth in *EPA’s Revised Public Notification Handbook*, EPA 816-09-013, March 2010 (“Handbook”). Each component of the broad public outreach plan should include, among other analogous public notice elements listed in the Handbook, clear instruction in English and Spanish for private drinking water well users to request free drinking water testing. By documenting responses to the public notices and requests for drinking water testing, Washington should measure its progress in contacting all private well users that were identified in the health assessment. For those private well users identified in the health assessment that do not respond to public notices, Washington should attempt personal communications, such as visits to individual residences.
4. **Drinking Water Testing** – An effective response plan provides laboratory analysis of a drinking water sample from the residence of any private well user in the LYV that requests testing, unless a nitrate test strip demonstrates that the nitrate concentration of the well is below 5 mg/L. Testing should be provided at no cost to LYV residents.
5. **Provision of Alternate Water** – Alternate drinking water should be offered to each residence where the drinking water sample exceeds the MCL based on laboratory analysis. Alternative water should be provided as needed for drinking, cooking, maintaining oral hygiene and dish washing at no cost to the resident and in a manner that minimizes the burden on the impacted resident to obtain safe drinking water, such as reverse osmosis (RO) treatment units, water delivery services or connection to a public water system. To the extent certain LYV residences will be connected to a public water

system, they should receive alternate water until construction is completed. Residences provided RO treatment units should be offered regular maintenance at no cost to the resident. The alternate water supply and any necessary maintenance should be made available to the impacted resident until sampling shows that nitrate concentrations in their private well no longer exceed the MCL.

6. **Public Records** – An effective response plan maintains and regularly publishes records such that LYV residents and the general public can better understand the scope and severity of nitrate contamination in the LYV and measure Washington’s progress in implementing its response plan. Information important for public review includes (a) the number and general location of private drinking water wells in the LYV GWMA; (b) quantitative data regarding Washington’s public outreach efforts and the responses received, including the number of residences that responded to public notices and the number of residences that received and responded to personal communications; (c) the number of residences that requested and were provided drinking water testing and the results; (d) the number of residences that were offered and accepted alternate drinking water, specifying the method of water delivery; (e) quantitative data regarding efforts to regularly maintain RO treatment units and (f) groundwater monitoring results from Ecology’s Ambient Groundwater Monitoring Network. In making this information publicly available, Washington should implement precautions to ensure that LYV residents’ personally identifiable information is kept confidential.¹
7. **Communication with EPA** – To ensure a more coordinated effort going forward, EPA requests that the agencies provide quarterly progress reports to EPA that (a) describe actions taken during the previous quarter to address the immediate health impacts of nitrate contamination; (b) identify major accomplishments and issues that arose; (c) describe actions planned for the next quarter and (d) describe any problems or delays encountered and the solutions implemented to address them. Less frequent progress reports may be appropriate as Washington finalizes, secures funding and begins implementation of a plan to address immediate concerns. Additionally, EPA asks the agencies to designate a point of contact for ongoing coordination between EPA and the state and local agencies and that the point of contact schedule recurring meetings coinciding with the progress reports.

EPA recognizes that certain LYV residents may continue to consume water that exceeds the MCL for nitrate if, for example, the resident does not respond to outreach attempts; nitrate concentrations fluctuate and an individual well does not demonstrate an exceedance when testing is performed or a resident moves to the LYV after initial public outreach efforts but before nitrate concentrations in groundwater fall below the MCL. Accordingly, the success of Washington’s response plan depends on the state’s willingness and ability to sustain public outreach, testing and alternative water supply for

¹ EPA acknowledges that Ecology’s letter described an “environmental information management publicly accessible database” by which Ecology publishes groundwater monitoring results. The results are not easily accessible nor referenced on Ecology’s and the LYV GWMA’s websites. As a component of the response action, EPA expects that state agencies will increase the visibility and accessibility of such information (e.g., in all appropriate languages) regarding nitrate contamination on state and local government websites.

so long as nitrate concentrations in LYV groundwater remain elevated. The need to inform and protect LYV residents from nitrate contamination and its potential health risks will remain even after the renewed outreach efforts outlined above.

Source Control Efforts

In addition to providing local residents with access to clean drinking water as discussed above, a long-term solution is needed – one that reduces the build-up of nitrate in drinking water through effective source control to protect drinking water supplies. This entails holding nitrate sources accountable by requiring them to assume some of the responsibilities set forth above and to change their practices to reduce the amount of nitrate they discharge to groundwater to protect the health of their employees and neighbors.

Washington has various tools to effect reductions in nitrate concentrations, such as its Dairy Nutrient Management Program and the authority to implement the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program, including the development and implementation of the NPDES Concentrated Animal Feeding Operation (CAFO) General Permit. In our August 18th, 2022 letter, EPA commended Ecology for certain revisions to the CAFO General Permit and encouraged the state to use its authorities to the fullest extent to protect underground sources of drinking water through additional measures, such as (1) more stringent groundwater monitoring requirements with clear applicability triggers; (2) manure storage lagoon requirements that ensure that significant nitrate sources line lagoons to prevent leakage and (3) requirements that ensure that, regardless of ownership, manure application fields are not a source of nitrate contamination. Making such requirements mandatory would help to reduce nitrate concentrations in LYV groundwater. We appreciate that Ecology is working to finalize the permit by the end of this year.

Regardless of the stringency of provisions in the NPDES CAFO General Permit, Washington's surface and groundwater resources will realize little benefit unless dischargers seek permit coverage and comply with its terms. In the past, only a few of the many CAFOs in the LYV have sought coverage under the General Permit. WSDA has explained that the tasks of inspecting CAFOs, evaluating compliance with both the CAFO General Permit and the dairy nutrient management program and identifying unpermitted discharges have recently been assigned to one WSDA inspector for all of eastern Washington, which includes the LYV. EPA commends WSDA for recently hiring new inspectors for this work statewide and for requesting funding for additional inspectors in the LYV, as we do not anticipate a significant increase in General Permit applications and compliance without additional resources committed to implementation and enforcement.

Washington is not alone in the effort to reduce sources of nitrate to groundwater. EPA has served and will continue to serve, as a partner in addressing nitrate contamination in the LYV. For example, in 2013 EPA issued an Administrative Order on Consent, pursuant to Section 1431 of the SDWA, to several CAFOs in the LYV and continues to oversee its implementation, including the provision of an alternative drinking water supply to downgradient residents; specific actions to control potential nitrate sources; measurement of the effectiveness of nitrogen source reduction actions through a network of monitoring wells and effective nutrient

management. Similarly, several concerned citizens groups have filed lawsuits in federal district court to implement source control measures at additional CAFOs in the LYV. EPA requests that the state and local agencies use all available regulatory authorities, including applicable enforcement authorities, to ensure appropriate mitigation measures on nitrate sources throughout the LYV.

In the recurring meetings between EPA and the state, EPA intends to discuss the state's efforts and progress in implementing changes necessary to mitigate nitrate sources. If EPA concludes that the state is not requiring sources to implement necessary changes, as outlined above, EPA will consider increased federal intervention, including use of its emergency authorities in Section 1431 of the SDWA, to lessen sources' contributions of nitrate to groundwater.

EPA appreciates your continued engagement and your efforts to address the complex groundwater contamination problems in the LYV. Your work in the LYV is particularly important given the disproportionate environmental impacts its residents face. Your staff may contact Jeff KenKnight at kenknight.jeff@epa.gov or (206) 553-6641 to begin scheduling the recurring meeting requested above. You are also welcome to contact me at kowalski.edward@epa.gov or (206) 553-6695. I look forward to additional coordination with you as you further develop and implement your plans to protect LYV residents from the serious health impacts associated with excess nitrate in drinking water.

Sincerely,

Edward J. Kowalski
Director